



August 28, 2003

DOCKET # 03-BSTD-1

California Energy Commission  
Attention: Docket No. 03-BSTD-1  
Dockets Office  
1516 Ninth Street, Mail Station 4  
Sacramento, CA 95814

### **NEMA Comments on Title 24 2005 45-day Language**

NEMA is the leading trade association in the United States representing the interests of electroindustry manufacturers. Founded in 1926 and headquartered near Washington, D.C., its 400 member companies manufacture products used in the generation, transmission and distribution, control, and end-use of electricity. Domestic shipments of electrical products within the NEMA scope exceed \$100 billion.

#### **General Comments**

NEMA believes that the lighting provisions are becoming too prescriptive, favoring specific design alternatives. So long as the Lighting Power Density and lighting controls requirements are met, designers should be free to use their expertise to satisfy customer requirements.

#### **Specific Comments**

##### **Residential**

There are two problems with the new High Efficacy Luminaire description.

1. It does not consider low wattage high pressure sodium or low wattage metal halide that might be used on the exterior of a house. Both of these sources have medium screw bases and operate on electromagnetic ballasts. Their source efficacy would exceed those listed on Table 150-C and both are clearly high efficacy sources. However, they are excluded by the currently written High Efficacy Luminaire requirement on page 142 --- (k) (1) disallowing medium screw based fixtures and requiring electronic ballast for lamps rated at greater than 18 watts.
2. It does not consider low voltage MR16 lamps. Although these would not have medium screw bases, they would not meet the lumen per watt requirements

on Table 150-C. However, for as little as 20 watts, an MR16 lamp, with a tightly controlled beam pattern can put more footcandles on a specific spot than 100 watts of fluorescent lighting filling up the room. They can also be dimmed to operate at even lower power levels and are highly efficient light sources at delivering light where it is needed. MR16 luminaires should be included in this category, but would be excluded by TABLE 150 C.

We would suggest that they add two exceptions to include both types of fixtures as High Efficacy Luminaires for residential use.

EXCEPTION 1 to Section 150 (k) (1) Residential Lighting High Efficacy Luminaires High Pressure Sodium or Metal Halide Luminaires containing medium screw base sockets and electromagnetic ballasts for lamps greater than 18 watts are considered High Efficacy Luminaires provided they meet the source efficacies contained in TABLE 150-C.

EXCEPTION 2 to Section 150 (k) (1) Residential Lighting High Efficacy Luminaires MR16 Luminaires containing bi-pin sockets and operated on low voltage transformers are considered High Efficacy Luminaires and do not have to meet the source efficacy requirements listed on Table 150-C.

Sincerely yours,

A handwritten signature in cursive script that reads "Edward Gray".

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